

See D1
16. (Reiterated) The method of claim 14, wherein at least a portion of the dedifferentiated pancreatic cells express a marker indicative of expansion.

17. (Amended) The method of claim 16, wherein the marker is cytokeratin.

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18. (Amended) The method of claim 14, wherein the component of extracellular matrix is laminin.

19. (Reiterated) The method of claim 14, wherein the extracellular matrix component is a basement membrane derived substance.

20. (Reiterated) The method of claim 19, wherein the basement membrane is laid down by an Engelbreth-Holm-Swarm tumor cell.

21. (Reiterated) The method of claim 14, wherein the extracellular matrix component is added by overlaying the population of dedifferentiated cells.

22. (Reiterated) The method of claim 14, wherein at least a portion of the cultured cells form cultivated islet buds.

23. (Reiterated) The method of claim 22, wherein the cultivated islet buds comprises hormone positive islet cells.

24. (Reiterated) The method of claim 22, wherein the cultivated islet cells express increased levels of insulin expression as compared to the dedifferentiated cells.

25. (Reiterated) The method of claim 22, wherein the cultivated islet cells express increased levels of glucagon as compared to the dedifferentiated pancreatic cells.

26. (Reiterated) The method of claim 14, wherein the pancreatic islet cells have the ability to secrete insulin in response to glucose.

Please add new claims 29-64.

B3 -- 29. A method of obtaining pancreatic islet cells, the method comprising:
obtaining a population of dedifferentiated pancreatic cells made by (a) providing pancreatic duct or exocrine cells, and (b) allowing said duct or exocrine cells to proliferate to form a population of dedifferentiated pancreatic cells;
adding a component of extracellular matrix to the population of dedifferentiated pancreatic cells; and
growing the cells, thereby obtaining pancreatic islet cells.

30. The method of claim 29, wherein the population of dedifferentiated pancreatic cells has been cultured until at least about 70% confluency before adding a component of the extracellular matrix.

31. The method of claim 29, wherein at least a portion of the dedifferentiated pancreatic cells express a marker indicative of expansion.

32. The method of claim 31, wherein the marker is cytokeratin.

33. The method of claim 29, wherein the component of extracellular matrix is laminin.

34. The method of claim 29, wherein the component of extracellular matrix is a basement membrane derived substance.

35. The method of claim 34, wherein the basement membrane is laid down by an Engelbreth-Holm-Swarm tumor cell.

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36. The method of claim 29, wherein the component of extracellular matrix is added by overlaying the population of dedifferentiated cells.

37. The method of claim 29, wherein at least a portion of the cultured cells form cultivated islet buds.

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38. The method of claim 37, wherein the cultivated islet buds comprises hormone positive islet cells.

39. The method of claim 37, wherein the cultivated islet cells express increased levels of insulin expression as compared to the dedifferentiated cells.

40. The method of claim 29, wherein the pancreatic islet cells have the ability to secrete insulin in response to glucose.

41. A method of obtaining pancreatic islet cells, the method comprising:
(a) obtaining a population of dedifferentiated pancreatic cells made by the process of:
(i) obtaining a population of adult or differentiated pancreatic cells substantially free of islet cells, and
(ii) allowing the adult or differentiated pancreatic cells to proliferate;
(b) adding a component of extracellular matrix to the population of dedifferentiated pancreatic cells; and
(c) growing the cells, thereby obtaining pancreatic islet cells.

42. The method of claim 41, wherein the population of adult or differentiated pancreatic cells substantially free of islet cells is obtained from cells remaining after islet isolation from a pancreatic tissue.

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43. The method of claim 41, wherein the population of adult or differentiated pancreatic cells substantially free of islet cells is selected based on the ability to adhere to a container.

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44. The method of claim 41, wherein at least a portion of the dedifferentiated pancreatic cells express marker indicative of expansion.

45. The method of claim 44, wherein the marker is cytokeratin.

46. The method of claim 41, wherein the component of extracellular matrix is laminin.

47. The method of claim 41, wherein the component of extracellular matrix is added by overlaying the population of dedifferentiated cells.

48. The method of claim 41, wherein at least a portion of the cultured cells form cultivated islet buds.

49. The method of claim 48, wherein the cultivated islet buds comprises hormone positive islet cells.

50. The method of claim 37, wherein the cultivated islet cells express increased levels of insulin expression as compared to the dedifferentiated cells.

51. The method of claim 41, wherein the pancreatic islet cells have the ability to secrete insulin in response to glucose

52. The method of claim 41, wherein an agent that promotes expansion is added to the adult or differentiated pancreatic cells.

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53. The method of claim 52, wherein the agent is a growth factor or a combination of growth factors.

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54. The method of claim 53, wherein the growth factor is selected from the group consisting of: keratinocyte growth factor, epidermal growth factor, transforming growth factor- α , hepatocyte growth factor, and combinations thereof.

55. The method of claim 54, wherein the growth factor is keratinocyte growth factor.

56. The method of claim 41, wherein the adult or differentiated pancreatic cells are placed on a substrate in a glucose-containing media.

57. The method of claim 41, wherein the population of adult or differentiated pancreatic cells is cultured until at least about 70% confluency before adding the component of extracellular matrix.

58. The method of claim 16, 31 or 44, wherein the marker is IPF-1.

59. The method of claim 16, 31 or 44, wherein the marker is Pref-1.

60. The method of claim 16, 31 or 44, wherein the marker is lack of insulin.

61. The method of claim 14, 29 or 41, wherein the component of extracellular matrix is collagen.

62. The method of claim 14, 29 or 41, wherein the component of extracellular matrix is entactin.

63. The method of claim 14, 29 or 41, wherein the component of extracellular matrix is heparin sulfate proteoglycan.

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64. The method of claim 14, 29 or 41, wherein the component of extracellular matrix
is nidogen. --
